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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,554	08/27/2001	Per Eld Ibsen	980.1109US01	4984
22865	7590	08/10/2005	EXAMINER	
ALTERA LAW GROUP, LLC 6500 CITY WEST PARKWAY SUITE 100 MINNEAPOLIS, MN 55344-7704			PAYNE, DAVID C	
			ART UNIT	PAPER NUMBER
			2638	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/940,554

Applicant(s)

IBSEN ET AL.

Examiner

David C. Payne

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 18-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 9 and 13 is/are rejected.
- 7) ☒ Claim(s) 7, 10-12, and 14-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Drawings

1. The drawings were received on 21 March 2005. These drawings are acceptable.

Response to Arguments

2. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Election/Restrictions

3. Claims 18-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 21, 2005.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 1-6, 8, 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukushima US 5,805,759 (Fukushima) in view of Ogusu et al. US 5917625 A (Ogusu).

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Re claims 1 and 24, Fukushima disclosed,

A channel power control device/method, comprising: a first multiple channel port (16 of Figure 22); a second multiple channel port (18 of Figure 22); a dispersion region (space between elements 20 and 22) where individual optical channels propagating from the first optical multiple channel port are spaced apart; a diffraction unit (20 of Figure 22) disposed between the first multiple channel port and the dispersion region, the diffraction unit defining wavelength-specific optical paths between the first multiple channel port and respective single channel ports of the plurality of single channel ports, the diffraction unit including at least first (20 of Figure 22) and second diffraction elements (22 of Figure 22); and a reflector (124 of Figure 22) in the dispersion region disposed to reflect respective individual optical channels from the first multiple channel port to the second multiple channel port.

Fukushima does not disclose a plurality of reflectors. However, it would have been obvious to one or ordinary skill in the art at the time of invention to separate the reflector into a plurality of reflectors as a preferred design choice where size of reflecting elements is of higher concern. Furthermore, making parts separable is not considered patentable over the prior art. Fukushima does not disclose that the diffraction gratings are transmissive diffraction gratings. Ogusu disclosed the use of transmissive diffraction gratings (140 of Figure 26). It would have been obvious to one or ordinary skill in the art at the time of invention to use transmissive diffraction gratings depending on the axis of the diffracted light in relation to the other system components. One would be motivated to transmissive diffraction gratings depending on how the light was to impinge on downstream elements in the system.

Re claims 2 and 3, in the modified invention of Fukushima and Ogusu, Fukushima disclosed further comprising a first light-focusing unit (28 of Figure 22) disposed on the plurality of wavelength-specific optical paths between the first multiple channel port and the diffraction unit.

Re claims 4 and 5, in the modified invention of Fukushima and Ogusu, Fukushima disclosed a second light-focusing unit disposed on the wavelength-specific optical paths between the diffraction unit and the plurality of reflectors in the embodiment of Figure 22. However, embodiment of Figure 12

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shows a second lens (30) used to focus the light onto an output port. It would have been obvious to one of ordinary skill in the art at the time of invention to use the Figure 12 arrangement with two lenses rather than one if the objective was to unfold the input and output ports into a single direction. Furthermore, making parts separable is not considered patentable over the prior art.

Re claims 6, in the modified invention of Fukushima and Ogusu, Fukushima disclosed a polarization separation unit (62 of Figure 12) disposed between the first multiple channel port and the diffraction unit to separate light entering the device from the first multiple channel port into first and second components having mutually orthogonal polarizations.

Re claim 8, in the modified invention of Fukushima and Ogusu, Fukushima disclosed a multiple channel waveguide (16 of Figure 22) coupled to the first multiple channel port.

Re claim 9, in the modified invention of Fukushima and Ogusu, Fukushima disclosed wherein the reflector has fixed values of reflectivity selected so as to impose a desired reflectivity profile across multiple channels received from the first multiple channel port (124 of Figure 22, single mirror).

Re claims 13, in the modified invention of Fukushima and Ogusu, Fukushima disclosed a dynamically adjustable attenuator (6 of Figure 22) disposed between the diffraction unit and one of the first and second multiple channel ports (see Fukushima e.g., col./line: 5/55-67).

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Allowable Subject Matter

6. Claims 7, 10-12, and 14-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (571) 272-3024. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp


David C. Payne
Patent Examiner
AU 2638